

REMARKS**General**

The above amendments and following remarks reflect the applicant's understanding of the objections after discussing them with the Examiner during a telephone conversation dated 13 July 2005.

Specifications:

By the above amendment, applicant has amended the title to reflect the cancellation of claims 1-20 and to better emphasize the novelty of the invention as described in the new claims 21 to 29.

In the specification, paragraph 7 on page 6 under the section titled "DRAWINGS -- FIGURES" was amended to better identify Fig 5 and correct a typographical error. Listing 63 on page 7 in column 2 was amended to better coordinate the terminology used in the specification and the claims. Paragraph 2 on page 9 starting at line 6 was amended to describe a previously unexplained element in Fig 3. Paragraph 4 beginning at the bottom of page 9 and concluding on page 10 was amended to match the changes made in paragraph 7 and listing 63 above.

The applicant has amended the abstract to reflect the cancellation of claims 1-20 and to better emphasize the novelty of the invention as described in the new claims 21 to 29.

Claims:

Applicant, by canceling claims 1-20 and substituting NEW claims 21 to 29, has defined the invention more particularly and distinctly so as to overcome the technical rejections and define the invention patentably over the prior art.

Specific

The following specific remarks are presented in the order in which they occurred on the Office Action dated 06/16/2005

Claims Rejections -- 35 USC § 102 (citing Wetzel, 5,225,167)

Rejected: Applicant claims 1, 2, 7-10, 12, 13, 15-17 and 19 as being anticipated by Wetzel.

Wetzel (5,225,167) shows a room sterilizer that circulates air in an enclosed space through an air filter equipped with a germicidal lamp. The sterilizer is a large wall unit, built into the room with a minimal amount of venting to the air outside the room.

Claims 1, 2, 7-10, 12, 13, 15-17 and 19 are canceled and NEW claims 21-29 are submitted.

New Claims 21 - 29 are written to better define the novel structure of the Applicant's invention and to better distinguish it over Wetzel. The new language distinguishes over Wetzel under Section 102 because Wetzel does not show a portable device which contains a series of modular and interchangeable air cleaning means. Wetzel is structured to primarily circulate the air within a room where the Applicant's invention is structured to exclusively pull outside air into the room. A listing of the structural differences between Wetzel and the Applicant's invention are as follows:

	<u>Applicant</u>	<u>Wetzel</u>
Air cleaning means	Modular	Integral to unit
	Interchangeable	Fixed

	Caps for disposal	Unprotected after use
	Located outside room	Located inside room
Air moving means	Interchangeable	Integral to unit/fixed
Air source	Exclusively Ambient	Primarily from room
Unit placement	Between ambient air and enclosed space	Within the enclosed space
Portability	Quickly assembled and installed into a window	Built into the room
Adaptability	Cleaning modules can be stacked and matched to changing threats	Filter built in unit and not easily exchanged or added to

These structural distinctions provide the Applicant's invention with novel and patentable structure over Wetzel under Section 102 and are submitted to be patentable merit under Section 103 because the Applicant's invention provides a very portable and adaptable air cleaning device that can be quickly and easily installed into an existing room or apartment. Additionally:

Applicant's invention solves a different problem than that of Wetzel.

Wetzel is structured to solve a different and defined problem: cleaning air in an existing enclosed space when that enclosed space is contaminated by contaminants that are of a predetermined character and that are generated within the enclosed space. The Applicants invention is designed to remove contaminants from air outside the room and then deliver that cleaned air into the room. The two solutions, while utilizing known air filtering/cleaning mechanisms, are, as listed above, structurally quite different and that structural difference creates two very different and novel

capabilities and results.

Wetzel does not suggest the modifications in Applicant's invention.

Wetzel's invention adequately solves the problem of internally generated contaminants. Within the target environment described in Wetzel, the contaminants are well known and the cleaning systems to remove them well established. Wetzel did not anticipate or suggest the need for a portable and modular unit that could be adapted to changing contaminants and a variety of enclosed spaces. The Applicant's modifications create a device with an entirely novel capability that is not addressed or anticipated by Wetzel.

Claims Rejections -- 35 USC § 103 (citing Wetzel, 5,225,167; Sakata et al., 5,798,455; Scherer et al., 5,884,865; Burkhart, 6,666,910)

Rejected: Applicant claim 4 as being unpatentable over Wetzel in view of Sakata et al. (5,798,455).

Sakata (5,798,455) shows a room cleaner that delivers cleaned air into an enclosed space. The air is passed through a series of two filters: one for particulates and one for chemical hydrocarbons. The system is designed to protect semiconductors stored in the enclosed space from surface contamination.

Claim 4 is canceled and NEW Claim 21 is submitted.

Claim 21 recites a modular system of air cleaning means that can be quickly and easily assembled into an ever-changing array of air cleaning means. This language

distinguishes over Sakata under Section 102 because Sakata does not show a modular, interchangeable system of filtering means that can be capped and safely disposed of after use. These distinctions are submitted to be of patentable merit under Section 103 because the Applicant's structure creates a portable air cleaning device that can be easily installed in an existing enclosed space by people who are not skilled in the art and science of air filtration. Additionally:

Unappreciated Advantage

Sakata, even in view of Wetzel, has all the disadvantages that were attributed to the existing prior art by the Applicant including: not portable, not easily installed in an existing enclosed space, provides no means for the average resident to maintain the unit before, after or during its operation, has a predetermined cleaning capability, and provides no protection to individuals seeking to dispose of used cleaning mechanisms. Any obvious combinations of Wetzel and Sakata, such as placing a series of filters in Wetzel does not overcome these disadvantages. The novel structure of the Applicant's invention has created a novel air cleaning device that eliminates the disadvantages of the prior art or any combination thereof.

Rejected: Applicant claim 18 as being unpatentable over Wetzel in view of Scherer et al. (5,884,865).

Claim 18 is canceled.

Rejected: Applicant claim 20 as being unpatentable over Wetzel in view of Burkhart (6,666,910).

Burkhart (6,666,910) shows a method of assembling an air filtration system consisting of an air filter(s) placed in a plastic sheet which in turn are placed into the side of a cardboard box to which an air pump is connected. This air filtration system is placed in the doorway of an enclosed space such that one side of the filter(s) is exposed to the air outside the room and the opposite side of the filter(s) is disposed in the box which is attached to the pump and is within the enclosed space.

Claim 20 is canceled and NEW Claim 21 is submitted.

Claim 21 recites a modular air cleaning device that can be quickly and easily assembled into an ever-changing array of air cleaning modules. This structure distinguishes over Burkhart under Section 102 because Burkhart does not show a modular, interchangeable array of filtering means that can be arranged to remove a variety of contaminants from the air. Additionally, Burkhart discloses a set of filters that are not totally disposed in the ambient air but are sandwiched between the ambient air and the enclosed space of the box supporting the filters. Such a structure would be susceptible to the leakage of contaminated air around the filter and into the enclosed space. The Applicant's air tight modular structure effectively eliminates this potential for leakage. These distinctions are submitted to be of patentable merit under Section 103 because the Applicant's structure creates a portable air cleaning device that can be quickly installed in an existing enclosed space by people who are not skilled in the art and science of air filtration. In addition, the modular structure allows the filters to be stacked to clean a variety of contaminants, the air tight housing of the modules directs the air flow through the cleaning means without a high potential for leakage into the enclosed space, and the modules can be safely disposed after use. Because Burkhart did not

address these and other unobvious issues that the Applicant's invention overcomes, the Applicant respectfully suggests that the Applicant's invention is not an obvious extension of Burkhart or Wetzel or any combination thereof.

Additionally:

Unsuggested Modification

The distinctions are submitted to be of patentable merit under Section 103 because the potential for leakage around the filters was recognized by Burkhart, but Burkhart did not suggest air tight modules or any type of module as a modification to overcome this problem.

Unappreciated Advantage

These distinctions are submitted to be of patentable merit under Section 103 because the modular array solves a variety of problems not anticipated by Burkhart such as the potential for the filters to become clogged and inoperative in high dust environments. The Applicant's modular array allows a series of filters that can be stacked to progressively remove coarse, medium and fine particles from the ambient air which allows the ultra fine HEPA type filters to more efficiently remove submicron contaminants for a longer period of time. These HEPA filters would be quickly clogged if directly exposed to dust laden air as is shown in Burkhart.

Rejected: Applicant claims 3, 5, and 6 are rejected as an obvious design choice in view of Wetzel.

Claims 3, 5, and 6 are canceled and NEW Claims 25, 26 and 27 are submitted.

New Claims 25, 26 and 27 recite a connective structure that supports the modular structure of the Applicant's invention. The connective structure recited in new Claims 25, 26 and 27 allows the components of the invention to be quickly and easily assembled and disassembled with interchangeable cleaning modules. Thus, the criticality and synergistic benefits of the circular threaded connection are supportive of the modular structure of the Applicant's invention which allows those unskilled in the art to quickly assemble and maintain the invention during use and is distinguished over Wetzel by that modular structure and the novel results that accrue thereof.

Rejected: Applicant claim 14 as being unpatentable over Wetzel in view of known and accepted use of gaskets to enhance sealing.

Claim 14 is canceled.

General Comments on Examiner's Section 103 Rejection of Applicant's Claims.

Crowded Art

Applicant has cited numerous patents which seek to create clean air spaces. The Examiner has cited numerous others. All these can be classified into two groups: those that clean the air in an enclosed space and those that deliver clean air to an enclosed space. The novelty and patentability of each entail their specific structure which is designed to address a specific threat or contaminant. Thus, Wetzel's invention addresses bio-hazards generated in a doctor's office, and Sakata addresses hydrocarbon contaminants in a semiconductor warehouse. Other inventors have created novelty and patentability in residential, commercial, industrial and medical environments. The basic mechanisms used to clean the air is the same. The novelty and patentability lie in how these mechanisms are

structure to meet a specific or emerging contamination threat. This has created a field of invention where small changes create significant, novel and patentable results. For this reason, the Applicant submits that the novel changes shown in the Applicant's invention distinguish from all the identified prior art and creates a novel and patentable result.

Lack of Implementation Precludes Obviousness

Wetzel, Sakata, Burkhart and others have all the disadvantages that were attributed to existing air cleaner systems by the Applicant including: are not portable, has a predetermined cleaning capability, and provides no protection to individuals seeking to dispose of used cleaning mechanisms, are not easily installed in an existing enclosed space, and provides no means for the average resident to maintain the unit before, after or during its operation. The fact that these disadvantages, while known, were not overcome until Applicant's invention suggests that the Applicant's invention is not obvious.

Claim Rejections -- 35 USC § 112

Rejected: Applicant claim 11 as having insufficient antecedent basis for a limitation in the claim.

Claim 11 is canceled.

Conclusion

The Examiner has demonstrated an excellent grasp of the technology surrounding this invention and has been extremely helpful in educating the applicant as to the intricacies of the patent application process. With his guidance and constructive inputs, the above amendment has been constructed. For all reasons cited in this amendment, the Applicant submits that the specification

and claims are now in proper form, and that the claims all define patentably over the prior art. Therefore, the applicant submits that this application is now in condition for allowance, which action the Applicant respectfully solicits.

Conditional Request For Constructive Assistance

Applicant has amended the specification and claims of this application so that they are proper, definite, and define novel structure which is also unobvious. Therefore it is submitted that patentable subject matter is clearly present. If, for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 2173.02 and § 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

If the Examiner agrees but does not feel that the present claims are technically adequate, applicant respectfully requests that the Examiner write acceptable claims pursuant to M.P.E.P. Section 707.07(j).

Very Respectfully,



Thomas Maskell

Applicant Pro Se

2585 Spangler Road
Poland, Ohio 44514
Phone: (330) 757-0501; Fax (330) 757-3546

Certificate Of Mailing: I certify that on the date below this document and referenced attachments, if any, will be deposited with the U.S. Postal Service as first class mail in an envelope addressed to: "Commissioner for Patents, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450."

2005 August 26

Thomas J. Maskell
Thomas J. Maskell, Applicant